REMARKS/ARGUMENTS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks.

Claims 1-11 and 13-21 were pending prior to the Office Action. In this Amendment, claims 18-21 are canceled without prejudice or disclaimer. Thus, claims 1-11 and 13-17 are pending. Claims 1, 14 and 17 remain independent.

In the Office Action, the Examiner makes the following rejections:

- claims 1, 2, 7-11, 13, 14, 17 and 19 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Chan et al. ("Mobility Management ... IP Environment", hereinafter "Chan") in view of Radhika (EP 1091528 A2); and
- claims 3-6, 15, 16, 18, 20 and 21 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Chan in view of Radhika as applied to claims 1, 14 and 17 above, and further in view of Persson et al. (U.S. Publication No. 2003/0208582 A1, hereinafter "Persson").

In this Amendment, claim 18 is canceled and the features therein are incorporated into independent claim 1; claims 19 and 20 are canceled and the features therein are incorporated into independent claim 1; and claim 21 is canceled and the features therein are incorporated into independent claim 17. Therefore, Applicants will treat all pending claims 1-11 and 13-17 as being

rejected based on Chan, Radhika, and Persson. Applicants respectfully traverse.

An aspect of the present invention relates to a system that allows a user terminal in a network to simultaneously access a plurality of radio based access networks of differing access technologies. Fig. 3 of the present disclosure illustrates a non-limiting embodiment of such a system. The system in Fig. 3 includes a vehicular network 17 to which a plurality of user terminals may connect. In Fig. 3, only one user terminal 18 is shown for clarity reasons. The vehicular network 17 includes access selection adapters 22 and 23, one for each type of access network technology 19, 20. The vehicular network 17 also includes an access selector 26 which is access technology independent. As seen, the access selection adapter 22 and 23 as well as the access selector 26 are all provided separate from the user terminal 18. The user terminal 18 communicates with the access selector 26 using an IP address of the access selector 26. *Disclosure, page 9, lines 1-2.* This makes the user terminal 18 independent of the access technologies used in the system.

This feature is reflected in independent claim 1 which recites, in part "a plurality of access selection adapters, each one being a network entity provided separate from the user terminal." As demonstrated in previous responses to office Action, Chan does not teach or suggest this feature.

Chan is directed toward an approach to handover management by applying fuzzy logic concept to a heterogeneous environment in which mobility

of user terminals between differing access technologies (Chan refers to access technologies as access segments). *Chan, Abstract.* Attention is respectfully directed to Fig. 1 of Chan which illustrates an architecture of the system under consideration. In this system, three different wireless access technologies are considered – GPRS, UMTS and a mobile satellite system. *Chan, introduction, first paragraph; Fig. 1.* The system also includes a multi mode terminal (MMT).

In the previous Office Action dated December 24, 2009, the Examiner alleged that the technology dependent specific terminal MT_{SAT}, MS_{UMTS} and MS_{GPRS} were equivalent to the plurality of access selection adapters as claimed. It was demonstrated in the Amendment submitted on April 26, 2010 that the terminals MT_{SAT}, MS_{UMTS} and MS_{GPRS} are all units contained within a single multi mode terminal MMT. Therefore, Chan does not teach or suggest the feature of "a plurality of access selection adapters, each one being a network entity provided separate from the user terminal" as claimed.

In the current Office Action, the Examiner now alleges that the edge routers ER are equivalent to the claimed plurality of access selection adapters. Even under this interpretation, Chan still does not teach or suggest the claimed feature of:

> a plurality of access selection adapters, each one being a network entity provided separate from the user terminal, and each one associated with a respective radio access network, and each access selection adapter structured for receiving radio access dependent information from its associated access network and for mapping said radio access dependent information to access technology independent status information.

Again referring to Fig. 1, Chan discloses that the core network (CN) of each access segment is connected to an ER of an Internet subnetwork. Note that the ERs are routers that enable each CN to access the Internet. The ER itself has no knowledge of the radio access dependent information associated with the wireless communication link established between the MMT and the wireless access technology specific nodes (BSS, UTRAN, satellite).

The Examiner points to Chan, page 43, right column, lines 32-38. In this relied-upon portion, Chan specifically indicates that the MMT, from the Internet perspective, is seen as a mobile node. Once the MMT selects an access segment, i.e. access technology, the access point to the Internet subnetwork is automatically defined. The access point is defined by the ER to which it is connected. *Chan, page 43, right column, lines 28-36.* Contrary to the Examiner's allegation, there is nothing to indicate that any of the ERs connected to the UMTS core network, the GPRS core network, or the FES receives radio access dependent information associated with an application resident on the MMT.

The Examiner also points to page 44, right column, lines 4-24 of Chan, which are similarly deficient. This portion describes the functions that are necessary when the MMT decides to change access segments. When this occurs, the care-of-address (CoA) must be changed. *Chan, page 44, left column, lines 12-18.* The CoA is an IP address used to determined the current location of the mobile node. *Chan, page 43, right column, lines 10-18.* Using

parameters that indicate radio coverage conditions and QoS perceived by the user, the MMT executes procedures with the objective of selecting the most suitable access segment. Any change in the access segment also results in change in the point of access to the Internet subnetwork, i.e. results in the change in the ER. *Chan, page 44, lines 8-21.* Again, there is no indication that the ERs themselves receive any radio access dependent information.

Following is also noted. Chan is very specific that the T-IWU located within the MMT performs the functions to keep track of available access segments. *Chan, page 44, lines 25-31.* This specifically teaches away from the access selector adaptor being separate from the user terminal.

Radhika and Persson, individually or in combination, do not cure these deficiencies of Chan. This is sufficient to distinguish claim 1 from the combination of Chan, Radhika, and Persson.

Radhika has other deficiencies. For example, contrary to the Examiner's allegation, Radhika does not disclose the feature of:

> an access selector being a network entity provided separate from the user terminal, and structured to interact with applications resident in the user terminal and to interact with each access selection adapter for selection of a radio access network based on an individual QoS profile representing an access technology independent information associated with each application and on said access technology independent status information.

In the Office Action, the Examiner points to paragraph [0018] of Radhika and alleges that the backend server is equivalent to the access selector feature as claimed. Radhika states that the gateway 111, via the mapping entity 114,

maps the application/middleware layer QOS to the corresponding network/link layer QOS services. Then the backend server uses the mapped network/link layer QOS to determined the available QOS services within the network. There is no indication that the backend server interacts with the applications resident on the terminals 102, 104.

Also, the Examiner appears to interpret the network/link layer QOS as being access technology dependent while the application/middleware QOS as being technology independent. But Radhika is clear that the backend server uses the mapped network/link layer QOS to determine the available QOS services. This directly contradicts the claimed feature of the access server selecting a radio access network based on access technology independent information.

Still further, Persson is deficient. For example, Persson does not teach or suggest the feature of "wherein each access selection adapter is structured to translate messages and parameters received from the associated access network into QoS parameters, and obtain access technology independent status information from the QoS parameters." Note that the access technology independent status information is a set of QoS related parameters relating to a traffic already existing in the respective access network, and the access technology independent information is a set of QoS related parameters defined as requirements associated with the application in the QoS profile.

In the Office Action, the Examiner alleges that the gateway illustrated in Fig. 9 of Persson is equivalent to the claimed access selection adapter. As one of ordinary skill would realize, only the UE and the UTRAN in this figure communicates wirelessly. Nothing in Persson indicates that the gateway somehow receives or sends radio access dependent information.

The Examiner alleges that [0026] – [0030] of Persson discloses the feature of translating messages and obtaining technology independent status information. On the contrary, these paragraphs merely indicate that IP-UMTS traffic is expected to increase in the future. Persson speculates that if the IP QoS parameters can be translated into UMTP QoS attributes, the bandwidth requirements can be determined for each application and the spectrum utilization can be efficient. There is nothing to indicate that already existing traffic related parameters are determined in the translation.

For at least the reasons stated above, independent claim 1 is distinguishable over the combination of Chan, Radhika, and Persson. For similar reasons, independent claims 14 and 17 are also distinguishable over the combination of Chan, Radhika, and Persson. The dependent claims are distinguishable over the same references by virtue of their dependencies from independent claims as well as on their own merits.

Applicants respectfully request that the rejection of claims based on Chan, Radhika, and Persson be withdrawn.

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact Hyung Sohn (Reg. No. 44,346), to conduct an interview in an effort to expedite prosecution in connection with the present application.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Respectfully submitted,

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